

From the:  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

DATE	9/2/07	DUE	--/--/--
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To:  
  
Fisher Adams Kelly  
GPO Box 1413  
BRISBANE QLD 4001

RECEIVED  
- 9 FEB 2006

**PCT**  
NOTIFICATION OF TRANSMITTAL OF  
INTERNATIONAL PRELIMINARY  
REPORT ON PATENTABILITY  
(Chapter II of the Patent Cooperation Treaty)

(PCT Rule 71.1)

Date of mailing  
(day/month/year) 07 FEB 2006

Applicant's or agent's file reference  
13824PC2-PMT/ADM

**IMPORTANT NOTIFICATION**

International application No.  
PCT/AU2004/001774

International filing date (day/month/year)  
17 December 2004

Priority date (day/month/year)  
17 December 2003

Applicant

ANOVA SOLUTIONS PTY LTD et al

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary report on patentability and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translations to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the *PCT Applicant's Guide*.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed invention is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the IPEA/AU

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ADRIANO GIACOBETTI

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**PATENT COOPERATION TREATY**  
**PCT**  
**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter II of the Patent Cooperation Treaty)  
(PCT Article 36 and Rule 70)

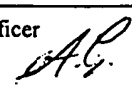
Applicant's or agent's file reference 13824PC2-PMT/ADM	<b>FOR FURTHER ACTION</b>		See Form PCT/IPEA/416
International application No. PCT/AU2004/001774	International filing date ( <i>day/month/year</i> ) 17 December 2004	Priority date ( <i>day/month/year</i> ) 17 December 2003	
International Patent Classification (IPC) or national classification and IPC  Int. Cl.  <div style="display: flex; justify-content: space-around;"> <span><i>A01G 9/02</i> (2006.01)</span> <span><i>A01G 27/06</i> (2006.01)</span> <span><i>B65D 85/52</i> (2006.01)</span> </div>			
Applicant ANOVA SOLUTIONS PTY LTD et al			

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 3 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
  - a. ☒ (*sent to the applicant and to the International Bureau*) a total of 4 sheets, as follows:

☒ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).  
☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
  - b. ☐ (*sent to the International Bureau only*) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or table related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

<input checked="" type="checkbox"/>	Box No. I	Basis of the report
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application

Date of submission of the demand 14 October 2005	Date of completion of this report 30 January 2006
Name and mailing address of the IPEA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929	Authorized Officer <div style="text-align: center; margin: 10px 0;">  </div> <b>ADRIANO GIACOBETTI</b> Telephone No. (02) 6283 2579

**Box No. I**      **Basis of the report**

1. With regard to the language, this report is based on:
- ☒ The international application in the language in which it was filed
- ☐ A translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3(a) and 23.1 (b))
- ☐ publication of the international application (under Rule 12.4(a))
- ☐ international preliminary examination (Rules 55.2(a) and/or 55.3(a))
2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-23 as originally filed/furnished
- pages\* received by this Authority on \_\_\_\_\_ with the letter of \_\_\_\_\_
- pages\* received by this Authority on \_\_\_\_\_ with the letter of \_\_\_\_\_
- ☒ the claims:
- pages as originally filed/furnished
- pages\* as amended (together with any statement) under Article 19
- pages\* 24, 25 received by this Authority on 14 October 2005 with the letter of 14 October 2005
- pages\* 26, 27 received by this Authority on 18 January 2006 with the letter of 18 January 2006
- ☒ the drawings:
- pages 1/9-9/9 as originally filed/furnished
- pages\* received by this Authority on \_\_\_\_\_ with the letter of \_\_\_\_\_
- pages\* received by this Authority on \_\_\_\_\_ with the letter of \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to the sequence listing (*specify*): \_\_\_\_\_
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to the sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims 1-38	YES
	Claims	NO
Inventive step (IS)	Claims 1-38	YES
	Claims	NO
Industrial applicability (IA)	Claims 1-38	YES
	Claims	NO

## 2. Citations and explanations (Rule 70.7)

Cited Prior Art Documents

D1- FR 2766327 A1	D2- FR 2701808 A1
D3- NL 9001748 A	D4- US 4219967 A
D5- US 4324070 A	D6- JP 8196157 A
D7- GB 2018117 A	D8- WO 1995/010934 A1
D9- US 4287682 A	

NOVELTY(N) AND INVENTIVE STEP(IS): Claims 1-38 (YES)

The invention of amended claims 1 and 34 relates to a pot for growing a plant. None of the above documents taken singly or in obvious combination disclose or fairly teach all the essential features of the invention. In particular the closest prior art documents (D1) to (D5) disclose pots with liquid transfer means that would be invaded by roots of a plant and hence these pots do not resist root escape. Hence the invention of claims 1 and 34; as well as their dependent claims; is considered to be novel and involve an inventive step.

INDUSTRIAL APPLICABILITY(IA): Claims 1-38 (YES)

The invention of claims 1 to 38 has industrial applicability because the pot can be made or used in industry.

CLAIMS

1. A pot for growing a plant or plants, the pot comprising:  
a side wall having an upper edge forming a mouth;  
5 a bottom wall continuous with the side wall, the bottom wall and side wall together defining a chamber for containing a growth medium; and  
liquid transfer means for transferring liquid between the growth medium and a local environment external to the pot and adjacent the base wall;  
10 wherein  
the liquid transfer means transfers liquid to and/or from an internal zone in the chamber, the internal zone spaced from the bottom wall, and the pot is adapted to resist root escape.
2. The pot of claim 1 wherein the liquid transfer means comprises one or  
15 more liquid transfer conduits.
3. The pot of claim 2 wherein each liquid transfer conduit extends upwardly from a base aperture in the bottom wall to an internal aperture positioned in the internal zone, the conduit open at each end.
4. The pot of claim 3 wherein each liquid transfer conduit is formed with  
20 a water-impervious side wall.
5. The pot of claim 4 wherein the liquid transfer conduit is cylindrical with a diameter in the range of 5mm to 50mm.
6. The pot of Claim 4 wherein each conduit extends inwardly in the range of 2mm to 80mm.
- 25 7. The pot of claim 4 further including retention means for retaining liquid transferring material in the liquid transfer conduit.
8. The pot of claim 7 wherein the liquid transferring material is one or more of a growth medium, coir dust, bark, polyester, and soil.
9. The pot of claim 8 wherein the conduit is dimensioned to receive the  
30 liquid transferring material under the influence of gravity.
10. The pot of claim 7 wherein the liquid transferring material is a solid, liquid-permeable plug.

11. The pot of claim 10 wherein the plug is an expanded plug having an inner end extending laterally beyond the side wall of a corresponding liquid transfer conduit.
12. The pot of claim 7 wherein the retention means is a mesh positioned in the base aperture.
13. The pot of claim 12 wherein the mesh is removably positioned in the base aperture.
14. The pot of claim 12 wherein the mesh is formed integrally with the liquid transfer conduit.
15. The pot of claim 3 wherein each liquid transfer conduit is formed integrally with the pot.
16. The pot of claim 4 wherein each liquid transfer conduit is formed as an inwardly extending slot.
17. The pot of claim 16 wherein each slot has a side with a width in the range of 1mm to 5mm and a length in the range of 5mm to 60mm.
18. The pot of claim 17 further comprising a cap over an internal opening of the slot, the cap extending downwardly of at least one free edge of the internal aperture to form a tortuous pathway for liquid flow.
19. The pot of claim 16 further including a material wick positioned in each slot.
20. The pot of claim 4 further comprising an internal cap adapted to cover the internal aperture, sufficiently loosely to allow liquid to pass between the cap and an edge of the aperture.
21. The pot of claim 20 wherein the internal cap is substantially planar.
22. The pot of claim 21 wherein the cap extends downwardly over an edge of the internal aperture.
23. The pot of either one of claim 20 or claim 21 wherein the cap is hinged to the liquid transfer conduit.
24. The pot of claim 1 wherein the liquid transfer means comprises one or more liquid permeable plugs each inserted through a corresponding base aperture and closely abutting a wall of the aperture.
25. The pot of claim 24 wherein each liquid permeable plug is formed

- from one or more of concrete, mortar, clay, rubber, polymeric material, wood and polyester.
26. The pot of claim 25 wherein each liquid permeable plug is cylindrical.
27. The pot of claim 25 wherein each liquid permeable plug includes a  
5 butt section which flares outwardly.
28. The pot of claim 24 wherein the liquid permeable plug is waisted to provide a seat for an edge of the base aperture.
29. The pot of claim 24 wherein a gap between the liquid permeable plug and the base aperture is 200 microns or less.
- 10 30. The pot of claim 29 wherein the gap is in the range of 50 to 100 microns.
31. The pot of claim 24 wherein each liquid permeable plug is removably fitted in its corresponding aperture.
32. The pot of claim 24 wherein each plug is held in position by wedges.
- 15 33. The pot of claim 3 wherein the bottom wall is substantially planar on its bottom surface.
34. A method of managing water content in a pot for growing one or more plants, the method comprising the step of:  
providing a transfer arrangement for transferring liquid directly to  
20 and/or from an internal zone of a growth medium inside the pot, the internal zone spaced from a bottom wall of the pot, and a local environment adjacent the bottom wall, the transferred liquid passing through a bottom wall and an inwardly extending conduit adapted to resist root escape.
35. The method of claim 34 further including the step of positioning  
25 material comprising growth medium in the inwardly extending conduit, the conduit having a first opening through the bottom wall and a second opening inside the internal zone, the material in the conduit acting as a liquid transfer material between the internal zone and local environment.
36. The method of claim 34 wherein providing a transfer arrangement  
30 includes the step of positioning a material wick in the inwardly extending conduit.
37. The pot of claim 1 further comprising a biocidal agent added to

the liquid transfer means.

38. The pot of claim 37 wherein the biocidal agent is copper hydroxide.



To:

Fisher Adams Kelly  
GPO Box 1413  
BRISBANE QLD 4001

**PCT**

WRITTEN OPINION OF THE INTERNATIONAL  
PRELIMINARY EXAMINING AUTHORITY  
(PCT Rule 66)

Date of mailing  
(day/month/year) 14 NOV 2005

Applicant's or agent's file reference  
13824PC2-PMT/TLA

REPLY DUE within **TWO MONTHS**  
from the above date of mailing

International application No.  
**PCT/AU2004/001774**

International filing date (day/month/year)  
17 December 2004

Priority date (day/month/year)  
17 December 2003

International Patent Classification (IPC) or both national classification and IPC  
Int. Cl. <sup>7</sup> A01G 9/02, 27/06, B65D 85/52

Applicant

ANOVA SOLUTIONS PTY LTD et al

1. ☒ The written opinion established by the International Searching Authority:

☒ is

☐ is not

considered to be a written opinion of the International Preliminary Examining Authority.

2. This **Second** (second, etc.) opinion contains indications relating to the following items:

☒ Box No. I Basis of the opinion

☐ Box No. II Priority

☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

☐ Box No. IV Lack of unity of invention

☒ Box No. V Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

☐ Box No. VI Certain documents cited

☐ Box No. VII Certain defects in the international application

☒ Box No. VIII Certain observations on the international application

The applicant is hereby invited to reply to this opinion.

**When?** See the Reply Due date indicated above. However, the Australian Patent Office will not establish the Report before the earlier of (i) a response being filed, or (ii) one month before the Final Date by which the international preliminary examination report must be established. The Report will take into account any response (including amendments) filed before the Report is established. If no response is filed by 1 month before the Final Date, the international preliminary examination report will be established on the basis of this opinion.

Applicants wishing to have the benefit of a further opinion (if needed) before the report is established should ensure that a response is filed at least 3 months before the Final Date by which the international preliminary examination report must be established.

**How?** By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3.  
For the form and the language of the amendments, see Rules 66.8 and 66.9.

**Also** For an additional opportunity to submit amendments, see Rule 66.4.  
For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4bis.  
For an informal communication with the examiner, see Rule 66.6.

4. The **FINAL DATE** by which the international preliminary report on patentability (Chapter II of the PCT) must be established according to Rule 69.2 is: 17 April 2006

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Authorized Officer

**ADRIANO GIACOBETTI**

Telephone No. (02) 6283 2579

Box No. I Basis of the opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This opinion is based on a translation from the original language into the following language  
which is the language of a translation furnished for the purposes of:
    - ☐ international search (under Rules 12.3 and 23.1 (b))
    - ☐ publication of the international application (under Rule 12.4)
    - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the elements of the international application, this opinion has been established on the basis of *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed.")*:
  - ☐ the international application as originally filed/furnished
  - ☒ the description: pages 1-23 as originally filed/furnished  
pages , received by this Authority on with the letter of  
pages , received by this Authority on with the letter of
  - ☒ the claims: pages , as originally filed/furnished  
pages , as amended (together with any statement) under Article 19,  
pages , received by this Authority on with the letter of  
pages 24-27 received by this Authority on 14 October 2005 with the letter of 14 October 2005
  - ☒ the drawings: pages 1/9-9/9 as originally filed/furnished  
pages , received by this Authority on with the letter of  
pages , received by this Authority on with the letter of
  - ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
  - ☐ the description, pages
  - ☐ the claims, Nos.
  - ☐ the drawings, sheets/figs
  - ☐ the sequence listing (*specify*):
  - ☐ any table(s) related to the sequence listing (*specify*):
4. ☐ This opinion has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
  - ☐ the description, pages
  - ☐ the claims, Nos.
  - ☐ the drawings, sheets/figs
  - ☐ the sequence listing (*specify*):
  - ☐ any table(s) related to the sequence listing (*specify*):

WRITTEN OPINION OF THE  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

International application No.

PCT/AU2004/001774

**Box No. V** Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims 1-33, 37, 38	YES
	Claims 34-36	NO
Inventive step (IS)	Claims 1-33, 37, 38	YES
	Claims 34-36	NO
Industrial applicability (IA)	Claims 1-38	YES
	Claims	NO

Citations and explanations:

Cited Prior Art Documents

D1- FR 2766327 A1	D2- FR 2701808 A1
D3- NL 9001748 A	D4- US 4219967 A
D5- US 4324070 A	D6- JP 8196157 A
D7- GB 2018117 A	D8- WO 1995/010934 A1
D9- US 4287682 A	

NOVELTY(N) AND INVENTIVE STEP(IS): Claims 1-33, 37, 38 (YES)

The invention of amended claim 1 relates to a pot for growing a plant. None of the above documents taken singly or in obvious combination disclose or fairly teach all the essential features of the invention. In particular the closest prior art documents (D1) to (D5) disclose pots with liquid transfer means that would be invaded by roots of a plant and hence these pots do not resist root escape. Hence the invention of claim 1; as well as dependent claims 2 to 33, 37 and 38; is considered to be novel and involve an inventive step. The invention also has industrial applicability.

NOVELTY(N) AND INVENTIVE STEP(IS): Claims 34-36 (NO)

In light of observation in Box VII, the invention of claim 34 is not novel and does not involve an inventive step over the document (D1) to (D5). For example, document (D3)\* discloses a flowerpot with a water supplying member (8) wherein the pot has as bottom wall (2) with a liquid transfer arrangement. The arrangement has a tube (9) (ie conduit) that extends into an internal zone of the growth medium (5) and to a "local environment" adjacent the bottom wall and outside the pot (1). The tube contains a water absorbing material (10) (ie material wick) for transferring liquid through the bottom wall. Therefore the features of claim 34 are disclosed in this document and hence the invention is not novel. Further features of claims 35 and 36 are considered to be disclosed and hence do not confer novelty to the invention.

(\*Please note D3 has a family equivalent of US 5136806 and should have been cited instead)

**Box No. VIII    Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

1. Claim 1 lacks clarity as there is no prior reference for the phrase "the base wall" (lines 8 and 9). The word "base" should probably be the word "bottom".
2. Independent claim 34 does not fully define the invention described. The added feature of amended claim 1 of the pot being adapted to resist root escape is an essential feature of the invention. However, this feature has not been included within this claim.

The claim also lacks clarity as the intended meaning of the phrase "local environment". It is considered that the zone outside the pot is the "local environment" and in some environments this can include pots being surrounded by water. Therefore the arrangement of a pot being in water is not excluded from the scope of claim 34.